

1 **CLAIMS:**

2 Having thus described our invention, what we claim as new
3 and desire to secure by Letters Patent is as follows:

4 1. A data processing system comprising:

5
6 an I/O port for establishing connection between said
7 system and readers;

8 a program having the functionality to communicate with
9 said readers via said I/O port;

10 an operating system providing access of said program to
11 said readers;

12 characterized by the further components:

13 a configuration tool for specifying access conditions
14 of said program to said readers;

15 a reader access layer component for determining the
16 reader to be accessed according to the access
17 conditions specified by said configuration tool.

- 1 2. A data processing system according to claim 1, wherein
2 said I/O devices are communication links, cryptographic
3 adapters, printers, or plotters.
- 4 3. A data processing system according to claim 1, wherein
5 said configuration tool may be an integral part of said
6 program.
- 7 4. A data processing system according to claim 1, wherein
8 said configuration tool and said reader access layer
9 may be an integral part of said program.
- 10 5. A data processing system according to claim 2, wherein
11 said configuration tool having access to a reader
12 access list defining access rights and access
13 priorities for that program in conjunction with said
14 readers connected to said system.
- 15 6. A data processing system according to claim 5, wherein
16 for all installed programs a common reader access list
17 is available defining access rights and access
18 priorities for those programs in conjunction with said
19 readers connected to said system.
- 20 7. A data processing system according to claim 5, wherein
21 for each installed program a single reader access list
22 is available defining access rights and access
23 priorities for that program in conjunction with said
24 readers connected with said system.

1 8. A data processing system according to claim 4, wherein
2 said access list is stored as file in a nonvolatile
3 storage media and is used by said reader access layer
4 during run-time.

5 9. A client-server system having:

6 a client comprising:

7 an I/O port for establishing a connection to readers,

8 at least one program product installed on said client
9 having the functionality to communicate with said
10 readers connected to said client,

11 a reader access list defining access conditions of each
12 of said programs installed on said client to said
13 readers connected to said client, and

14 a reader access layer component for determining the
15 readers to be accessed according to the access
16 conditions specified by said configuration tool
17 installed on said server; and

18 a server system comprising:

1 a reader access list defining access conditions of each
2 programs installed on said client to readers
3 connected to said client, and

4 a configuration tool for specifying access conditions
5 of said programs to said readers connected to said
6 client.

7 10. A method for accessing readers by means of a system
8 according to claim 1, comprising the steps of:

9 sending a request for using a reader from said program
10 to reader access layer;

11 calling up a reader access list by said reader access
12 layer;

13 carrying out a routine by said reader access layer by
14 means of said reader access list with the following
15 steps:

16 identifying an available reader with highest priority;
17 and

18 returning result to said program.

19 11. A method according to claim 8, wherein said routine
20 comprises the steps of:

1 identifying a particular reader with the highest
2 priority by using said reader access list;

3 examining the availability of said particular reader;

4 if said particular reader is not available, identifying
5 a next reader with the next lower priority by using
6 said reader access list and examining the availability
7 of said next reader; and

8 repeating the steps of identifying and examining using
9 a subsequent lower priority as long as an available
10 particular reader is identified.

11 12. A method according to claim 10, wherein a newly added
12 reader automatically receives the lowest priority in
13 the reader access list.

14 13. A method according to claim 10, wherein programs having
15 no assigned priorities in the reader access list
16 receive a standard priority in said reader access list.

17 14. A method according to claim 10, including changing
18 assigned priorities and standard priorities using the
19 configuration tool.

20 15. A method according to claim 10, wherein the priority
21 (0) means that the reader is only available for
22 programs with this reader selected.

- 1 16. A computer program product stored on a
2 computer-readable media containing software for
3 performing the method according to claim 10.
- 4 17. A computer program product comprising a computer usable
5 medium having computer readable program code means
6 embodied therein for causing a data processing system,
7 the computer readable program code means in said
8 computer program product comprising computer readable
9 program code means for causing a computer to effect the
10 functions of claim 1.
- 11 18. An article of manufacture comprising a computer usable
12 medium having computer readable program code means
13 embodied therein for causing accessing of readers, the
14 computer readable program code means in said article of
15 manufacture comprising computer readable program code
16 means for causing a computer to effect the steps of
17 claim 10.
- 18 19. A program storage device readable by machine, tangibly
19 embodying a program of instructions executable by the
20 machine to perform method steps for accessing of
21 readers, said method steps comprising the steps of
22 claim 10.